

(Issued as Memo.No.31672/Reforms/2008, dated 26-12-2008)
(From the Authorized Signatory M/s Vinay Power Generations
Limited letter dated 13.2.2009)

Please see the notes of Energy (RES) Department at Page 1 ante/NF; the notes of Irrigation Department at Pages 2—3 ante and the letter of M/s Vinay Power Generations Limited together with the orders of Secretary (AD) thereon at Page 23 Cf.

The subject matter in this file pertains to the request of M/s Vinay Power Generations Limited for issuance of “No Objection Certificate” for the establishment of 22.5 MW Mini Hydel Power Project at the Head Regulator of Nagarjuna Sagar Left Canal at Nalgonda District.

The Energy (RES) Department in their Notes at Page 1 NF have stated that Ms/s Vinay Power Generations Limited have requested the Hon’ble Chief Minister to instruct the concerned Department to expedite the “No Objection Certificate” for setting up of their proposed Mini Hydel Plant of 22.5 MW at head regulator of Nagarjunasagar Left Canal in Nalgonda District by M/s Vinay Power Generations Limited and that same was registered in favour of the Company by NEDCAP vide letter dated 23-10-1999. Subsequently the detailed project report submitted by the Developer was forwarded to the Chief Engineer Nagarjuna Sagar Project and in turn the CE, CDO with his recommendations has forwarded for issuance of No Objection Certificate by Irrigation Department. With the above remarks, the Energy Department have transferred the file for taking further necessary action in the matter, as No Objection Certificate has to be issued by I&CAD Department.

In this connection it is submitted that the proposal of M/s Vinay Power Generations Limited for setting up of 22.5 MW Mini Hydel Power Plant at Head Regulator of Nagarjunasagar Left Canal

at Nalgonda District was examined in the Department and the connected Notes of the Department may be perused from PPs 1—4 ante (C.No.46457/ QC&IWS/99) and also the orders of the then Principal Secretary thereon at Page 18 NF therein. The file was referred to Energy Department for their views in the matter.

The Energy Department had examined the matter in consultation with NEDCAP & CMD, APGENCO. The connected notes of Energy Department may be perused at Pages 1—7 ante/NF (C.No.232/RES/2000) and the observations of the then Principal Secretary (Energy) at Pages 8—10 ante/NF. The Energy Department have stated that the proposal is based on the present operating limits of APGENCO Power Stations indicated below:-

1. The Power House of APGENCO cannot operate when Nagarjunasagar Reservoir level is below +540 ft (+164.59 M)
2. Even when the APGENCO's Power House is operating, there are discharges about 30 to 100 cumecs being released through Head Regulator.
3. There are discharges even exceeding 11,000 cusecs through Head Regulator when the Reservoir level is below +540.00 ft.

and therefore they have proposed to construct a second power house on left side of Head Regulator and request for allotment. In this connection the then Principal Secretary (Energy) vide Para 19 NF (C.No.232/RES/2000) has stated that it is reported by the APGENCO at Pages 79-91 Cf that they are removing the silt and mud accumulated at some places at the bottom of NS Left Canal and once the canal improvement is over, the APGENCO would be able to tap water through their machines up to the level of 534ft, resulting in additional energy generation of 15 MUs This would mean, in the projection made by the small hydro developer, there will be a reduction of output of the order of 15 MU and the private developer

will be able to generate only 40 MUs. At the cost projected by the developer, the initial cost per unit will come to Rs.5/- and levelised cost around Rs.3.65 per Kwh. While the economics and viability of the project with the additional energy generation by APGENCO, is a matter for the developer to contend with, APGENCO has expressed No objection to setting up of Power House to generate 40 MUs subject to the following conditions:-

- 1) The 2nd Power House shall be designed to utilize the total Irrigation discharges released through the Head Regulator when the Reservoir Level is below 534 ft only
- 2) When the Reservoir level is above 534 ft., the maximum discharges through the existing APGENCO's Power House will be about 10,000 Cusecs. Hence, the 2nd Power House shall be designed only to utilize the balance water discharged through Head Regulator.

Therefore the Energy Department would support the proposal for setting up of the second plant subject to the conditions stipulated above.

Subsequently the issue was referred to the Committee constituted vide G.O.Ms.No.58, I&CAD dated 25.4.2000 and the CE, NSP was requested to place the views of Energy Department as referred above before the Committee for taking appropriate recommendation and consideration of Government vide Memo.No.46457/QC&IWS/99, dated 17.01.2001 (Page.83 CF) . The Technical Evaluation Note may be seen

The Standing Committee on Mini Hydel Schemes in its meeting held on 19-9-2001 in the Chambers of ENC, I&CAD discussed the proposal and it is observed by the Committee that the Scheme is Reservoir based and it is proposed on left side of Head Regulator of Left Main Canal utilizing the head between the Reservoir Level and FSL of Canal. The scope of the Scheme is designed for two different

scenarios keeping in view of the operating conditions of existing APGENCO Power House (2x30 MW) on Right side of Left Main Canal.

1. When the Reservoir Level is above 540 ft with head ranging from 8.25 m to 23m and discharge 67.4 cumecs. (High head and Low discharge)
2. When the Reservoir Level is below 540 ft with head ranging from 1.5m to 10.5m and discharge 231 cumecs. (Low head and high discharge)

Further two separate sets of power units 2x4500 KW and 3x4500 KW are proposed for the above two scenarios. The Government vide Memo.No.46457/QC&IWS/99, dated 17.1.2001 suggested to operate these units of 3x4500 KW for reservoir level below 534 ft only as APGENCO will be able to tap water up to this level. The layout consists of approach canal / tunnel close to dam and tail race channel which merges with canal at 272m downstream of head regulator. Similar layouts including a tunnel made by APGENCO for the existing canal power house and that the layout as proposed by the developer is technically feasible. However extra care is required while digging tunnel

Special Conditions:-

1. Approach channel / tunnel portion shall be excavated as per departmental specifications. Care shall be taken while drilling tunnel
2. The developer shall provide a separate regulator at a location suggested by Chief Engineer, NSP and place at the disposal of the department to regulate discharges in conjunction with APGENCO drawls and canal requirements.
3. The second unit of 3x4500 kw shall be operated when the reservoir level is below 540 ft only
4. The design and drawing of approach channel, tunnel and tail race channel including regulator shall be got approved by

the department. The tunnel shall be excavated under expert supervision.

5. At the tail race tunnel exit, the sides of the N.S.Left Canal must be grouted and lined. The muck in the NS Left Main Canal due to this work must be removed by the developer and see that there shall not be any obstruction to the flows in the NS left main canal. Developer must take necessary steps well in advance to prevent the slips in the portion of NSLC between NSLC head regulator and Chalakurty tunnel entrance due to excavation of tail race tunnel. The developer must provide sufficient amount incorporating this item in the estimate.

Subject to the above conditions the Committee recommends the scheme for consideration of the Government for issue of No Objection Certificate.

While the matter stood thus, the policy on Mini Hydel Power Stations has changed and consequently fresh guidelines were issued by Government in G.O.Ms.No.165, I&CAD dated 11.7.2007. As per this G.O., "No Objection Certificate" for the construction of Mini Hydel Stations on Major Canals and Major Rivers viz., Krishna, Godavari and Pennar and on such other Rivers as the Government may from time to time notify as restricted for the development of Mini Hydel Projects, should not be entertained. However, construction of Mini Hydel Stations can be considered along the Vagus and Streams subject to the General conditions and Technical Conditions. It is further ordered under Para (6) of the G.O. that "For selection of developers, to be transparent, the possible locations on canals and natural streams shall have to be got investigated and identified and the intending developers would be required to bid for development of Mini Hydel Project. Based on the Bid parameters, a developer would be selected.

Based on the above guidelines a list of Mini Hydel Schemes which includes the present proposal which were referred to Government by the Standing Committee, has been forwarded to the Chief Engineer, Central Designs Organization, Member-Convener of the Standing Committee constituted vide G.O.Ms.No.58, I&CAD dated 25.4.2000 with a request to place the proposals before the Standing Committee for its examination in terms of orders issued in G.O.Ms.No.165, I&CAD dated 11.7.2007 and send the recommendations of the Committee, as the file has to be circulated to Hon'ble CM vide Gov.Memo.No.6055/Reforms/2004, dated 6.8.2007. The recommendations of the Committee as per the new guidelines are still awaited.

In this connection the CE, CDO in his letter dated 5.1.2009 in response to the Govt.Memo.No.6055/Reforms/2004, dated 6-8-2004 has stated that the ENC (Irrigation) / ENC (Medium Irrigation) / the CE, NSP Project, CADA, Right Main Canal and Chief Engineer Left Main Canal are being requested to circulate the proposals of Mini Hydel Power Plant of 22.5 MW at Head Regulator of Nagarjunasagar Left Canal at Nalgonda District by M/s Vinay Power Generation Limited and other Mini Hydel Projects to the members of the Standing Committee on Mini Hydel Schemes as per the guidelines of G.O.Ms.No.165, I&CAD dated 11.7.2007 for taking further necessary action to place them before the Standing Committee.

With the above information the file is submitted with reference to the CMP note received at Page 1 Cf.

GOVERNMENT OF ANDHRA PRADESH
IRRIGATION & CAD (PW) DEPARTMENT

Memo.No.31672/Reforms/2008

Date:12-03-2009

Sub:- Mini Hydel Power Plant – Mini Hydel Power Plant of 22.5 MW at

Head Regulator of Nagarjunasagar Left Canal at Nalgonda District

by M/s Vinay Power Generation Limited - Issue of NOC -
Regarding

Ref: 1) Govt.Irrigation & CAD
Memo.No.31672/Reforms/2008, dated
26.12.2008

2) From the Chief Engineer, Central Designs
Organization

Letter.No.CE/CDO/B&CS.II/1230/2009/231, dated
5.1.2009.

The attention of Chief Engineer, Central Designs Organization is invited to the Govt.Memo first cited. He is requested to place the above Mini Hydel Scheme before the Standing Committee constituted vide G.O.Ms.No.58, I&CAD dated 25.4.2000 with reference to the guidelines issued in G.O.Ms.No.165, I&CAD dated 11.7.2007 and furnish its recommendations to Government at the earliest for taking necessary action.

A SUBBA RAO
SPECIAL OFFICER (TECH)

To
The Chief Engineer, Central Designs Organization
M.J. Road, Hyderabad

// FORWARDED BY ORDER//

SECTION OFFICER

(Issued as Memo.No.31672/Reforms/2008, dated 12-3-2009)
(From Special Secretary to CM Note No.12143/GEN/2009, dated 4.3.2009)
(From Chief Engineer, NSP Letter.No.C/NSP/OT.4/AEE.4/1869/98-A/Vol.II,497
dated 7.5.2009)

The Notes submitted at Pages 5-10 ante/NF; the Note received from Spl.Secy, to CM at Page 27 Cf., and the report received from Chief Engineer, NSP at Page 33-34 Cf may kindly be perused.

The subject matter in this file pertains to the request of M/s Vinay Power Generations Limited for issuance of "No Objection Certificate" for the establishment of 22.5 MW Mini Hydel Power Project at the Head Regulator of Nagarjuna Sagar Left Canal at Nalgonda District.

Government in G.O.Ms.No.165, I&CAD Department dated 11.7.2007 issued orders that (i) No Objection Certificate" for the construction of Mini Hydel Stations on Major Canals and Major Rivers viz., Krishna, Godavari and Pennar and on such other rivers as the Government may from time to time notify as restricted for the development of Mini Hydel Projects, should not be considered. (ii) However, construction of Mini Hydel Stations can be considered along the Vagus and Streams subject to stipulation of technical and general conditions

In view of the above, the Chief Engineer, Central Designs Organization has been requested to place the above proposal before the Standing Committee constituted vide G.O.Ms.No.58, I&CAD dated 25.4.2000 for its examination in terms of orders issued in G.O.Ms.No.165, I&CAD dated 11.7.2007 and send the recommendations of the Committee as the file has to be circulated to Hon'ble CM.

In response to the above, the Chief Engineer, NSP his letter dated 7.5.2009 has stated that the proposal of M/s Vinay Power Generations Limited, Hyderabad for establishment of Mini Hydel Schemes of 22.5 MW at Head Regulator of N.S.Left Canal was submitted to the Standing Committee on 2.3.2009. The Standing Committee in the meeting held on 31.3.2009 reviewed the proposal as per the guidelines issued in G.O.Ms.No.165, dated 11.7.2007 and opined that as per Para (5) of G.O.Ms.No.165, dated 11.7.2007 Mini Hydel Scheme on Major Canals shall not be considered and

concluded that as per the provisions of the G.O., it is not possible to consider the Hydel Power Plant of 22.5 MW at Head Regulator of Nagarjuna Sagar Left Canal, proposed by M/s Vinay Power Generations Limited. A copy of the minutes communicated by the CE, NSP may be seen at Page 39-49 Cf.

Submitted for kind perusal and further orders in the matter.